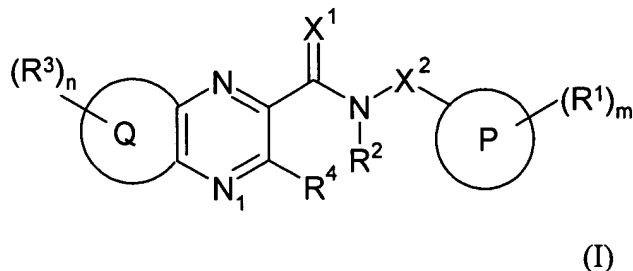


AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A compound having the formula I



wherein:

X¹ is O or S;

X² is a bond or ~~C₁₋₃alkyl~~ C₁₋₃alkylene;

P is C₃₋₇cycloalkyl or C₄₋₇cycloalkenyl;

R¹ is hydrogen, C₁₋₆alkyl, cyano, halogen and C₁₋₆alkylhalo, and one or more R¹ may be connected to each other or to one of the atoms that constitutes P to form a bridge or spirocyclo;

R² is hydrogen, C₁₋₃alkyl, fluoromethyl, difluoromethyl, trifluoromethyl, methoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, C₀₋₃alkylamino, C₀₋₃alkylhydroxy or C₀₋₃alkyldimethylamino;

R⁴ is hydrogen, C₁₋₃alkyl, fluoromethyl, difluoromethyl, trifluoromethyl, methoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, C₀₋₃alkylamino, C₀₋₃alkylhydroxy or C₀₋₃alkyldimethylamino;

Q is a saturated or partially unsaturated ring containing 4, 5, 6 or 7 atoms independently selected from C, S, O and N, ~~which may be saturated or partially unsaturated and~~ said ring may further contain groups independently selected from SO, SO₂, CO, cyano and CS;

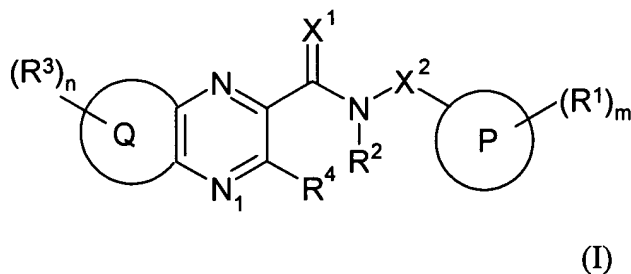
R³ is hydrogen, hydroxy, halogen, nitro, cyano, OC₁₋₃alkylhalo, C₁₋₃alkylhalo, C₁₋₃alkyl, C₁₋₃alkoxyC₀₋₃alkyl, ~~[[,]] C₀₋₃alkylOC₂₋₄alkanol, C₁₋₃alkanol, C₀₋₃alkylOC₂₋₄alkanol, C₁₋₃alkanol,~~ amino, C₁₋₃alkylaminoC₀₋₃alkyl, (C₁₋₃alkyl)₂aminoC₀₋₃alkyl, amide, C₁₋₃alkylamideC₀₋₃alkyl or (C₁₋₃alkyl)₂amideC₀₋₃alkyl;

n is 0, 1, 2, 3 or 4; and

m is 0, 1, 2, 3 or 4;

or N₁-oxides, ~~salts, solvates or solvated~~ or salts thereof, with the proviso that the following compound is excluded from formula I: 3-amino-5,6,7,8-tetrahydrobenzo[b]pyrazine-2-(N-cyclohexyl)carboxamide.

2. (Currently Amended) A compound having the formula I



wherein:

X¹ is O or S;

X² is a bond or ~~C₁₋₃alkyl~~ C₁₋₃alkylene;

P is C₃₋₇cycloalkyl or C₄₋₇cycloalkenyl;

R¹ is hydrogen, C₁₋₆alkyl, cyano, halogen and C₁₋₆alkylhalo, and one or more R¹ may be connected to each other or to one of the atoms that constitutes P to form a bridge or spirocyclo;

R² is hydrogen, C₁₋₃alkyl, fluoromethyl, difluoromethyl, trifluoromethyl, methoxy, fluoromethoxy, difluoromethoxy or trifluoromethoxy;

R⁴ is hydrogen;

Q is a ring containing 4, 5, 6 or 7 atoms independently selected from C, S, O and N, which may be saturated or partially unsaturated and said ring may further contain groups independently selected from SO, SO₂, CO, cyano and CS;

R³ is hydrogen, hydroxy, halogen, nitro, OC₁₋₃alkylhalo, C₁₋₃alkylhalo, C₁₋₃alkyl,

C₁₋₃alkoxyC₀₋₃alkyl, C₁₋₃alkanol, cyano, amino or amide;

n is 0, 1, 2, 3 or 4; and

m is 0, 1, 2, 3 or 4;

or N₁-oxides, ~~salts, solvates or solvated~~ or salts thereof.

3. (Original) The compound according to any one of claims 1 or 2, wherein P is C₃₋₇cycloalkyl substituted with one or more R¹, wherein R¹ is hydrogen, C₁₋₆alkyl, cyano, halogen or C₁₋₆alkylhalo, and one or more R¹ may be connected to each other or to one of the atoms that constitutes P to form a bridge or spirocyclo.
4. (Original) The compound according to claim 3, wherein P is C₅₋₇cycloalkyl substituted with one or more R¹, wherein R¹ is methyl.
5. (Currently Amended) The compound according to any one of claims 1 or 2 ~~to 4~~, wherein X¹ is oxygen.
6. (Currently Amended) The compound according to any one of claims 1 or 2 ~~to 5~~, wherein X² is a bond.
7. (Currently Amended) The compound according to any one of claims 1 or 2 ~~to 6~~, wherein R² is hydrogen.
8. (Currently Amended) The compound according to any one of claims 1 or 2 ~~to 7~~, wherein R⁴ is hydrogen or methyl.
9. (Currently Amended) The compound according to any one of claims 1 or 2 ~~to 8~~, wherein Q is a ring containing 5, 6 or 7 atoms independently selected from C, O and N, which may be saturated or partially unsaturated.
10. (Currently Amended) The compound according to any one of claims 1 or 2 ~~to 9~~, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.

11. (Currently Amended) The compound according to any one of claims 1 ~~or 2 to 10~~ having a trans-relationship between R¹ and X² on ring P, ~~when~~ wherein P is cyclohexane, and R¹ and X² ~~is~~ are attached to P at ~~position~~ positions 4 and 1, ~~respectively~~ respectively.

12. (Currently Amended) The compounds

N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
N-(4,4-dimethylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
or ~~salts, solvates or solvated~~ salts thereof.

13. (Currently Amended) The compounds

N-(4,4-dimethylcyclohexyl)-3-methyl-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
8-methyl-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
7-hydroxy-5,7-dimethyl-N-(trans-4-methylcyclohexyl)-6,7-dihydro-5H-cyclopenta[b]pyrazine-2-carboxamide,
N-(trans-4-methylcyclohexyl)-6,7,8,9-tetrahydro-5H-cyclohepta[b]pyrazine-2-carboxamide,
7-methyl-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
6-methyl-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
N-(trans-4-methylcyclohexyl)-6,7-dihydro-5H-cyclopenta[b]pyrazine-2-carboxamide,
N-(trans-4-methylcyclohexyl)-7,8-dihydro-5H-pyrano[3,4-b]pyrazine-2-carboxamide,
N-(trans-4-methylcyclohexyl)-7,8-dihydro-5H-pyrano[3,4-b]pyrazine-3-carboxamide,
7-hydroxy-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
6-hydroxy-N-(trans-4-methylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide,
N-(4,4-dimethylcyclohexyl)-5,6,7,8-tetrahydroquinoxaline-2-carboxamide 4-oxide and
6,7-dimethyl-N-(4-methylcyclohexyl)-6,7-dihydro-5H-cyclopenta[b]pyrazine-2-carboxamide,
or ~~salts, solvates or solvated~~ salts thereof.

14. (Withdrawn and Currently Amended) A pharmaceutical composition comprising as active ingredient a therapeutically effective amount of the compound according to any one of claims 1

or 2 ~~to 13~~, in association with one or more pharmaceutically acceptable diluent, excipients and/or inert carrier.

15. (Withdrawn) The pharmaceutical composition according to claim 14, for use in the treatment of Group I mGluR mediated disorders.

16.-18. (Cancelled)

19. (Withdrawn and Currently Amended) A method of treatment of Group I mGluR mediated disorders, comprising administering to a mammal, including man in need of such treatment, a therapeutically effective amount of the compound according to any one of claims 1 or 2 ~~to 13~~.

20. (Withdrawn) The method according to claim 19, for use in treatment of neurological disorders.

21. (Withdrawn) The method according to claim 19, for use in treatment of psychiatric disorders.

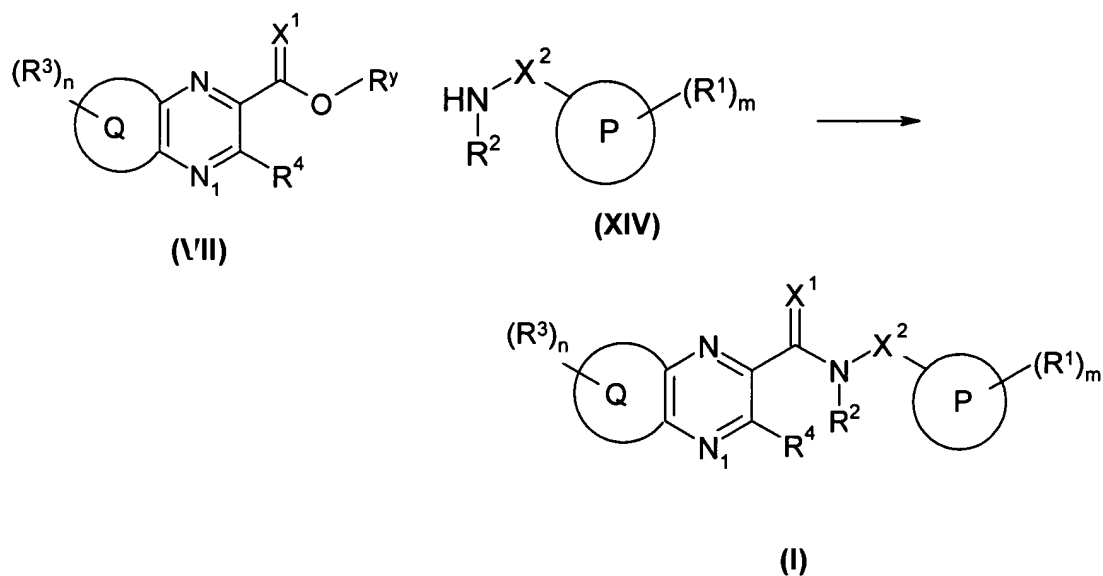
22. (Withdrawn) The method according to claim 19, for use in treatment of chronic and acute pain disorders.

23. (Withdrawn) The method according to claim 19, for use in treatment of gastrointestinal disorders.

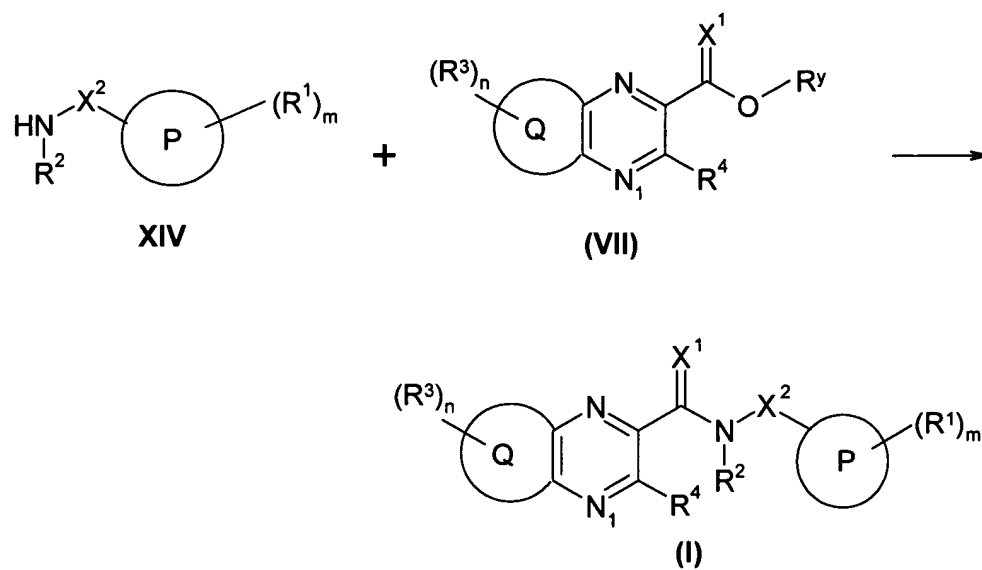
24. (Withdrawn) A method for inhibiting activation of Group I mGluR receptors, comprising treating a cell containing said receptor with an effective amount of the compound according to claim 1 or 2.

25. (Withdrawn) Processes for the preparation of the compound according to claim 1 or 2, wherein P, Q, X¹, X², R¹, R², R³, R⁴, m and n are, unless otherwise specified, defined as in formula I, comprising of:

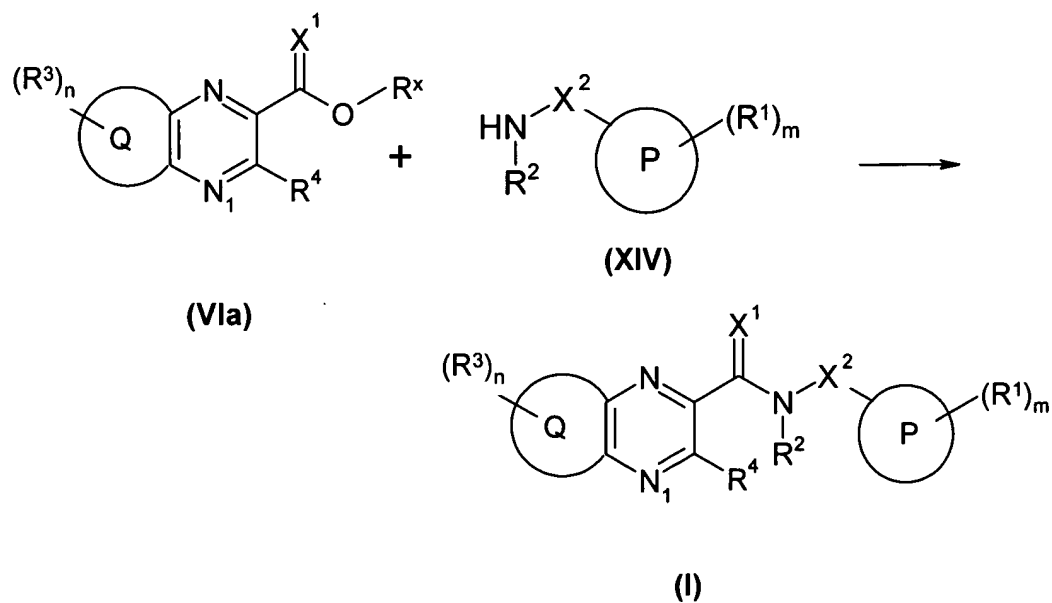
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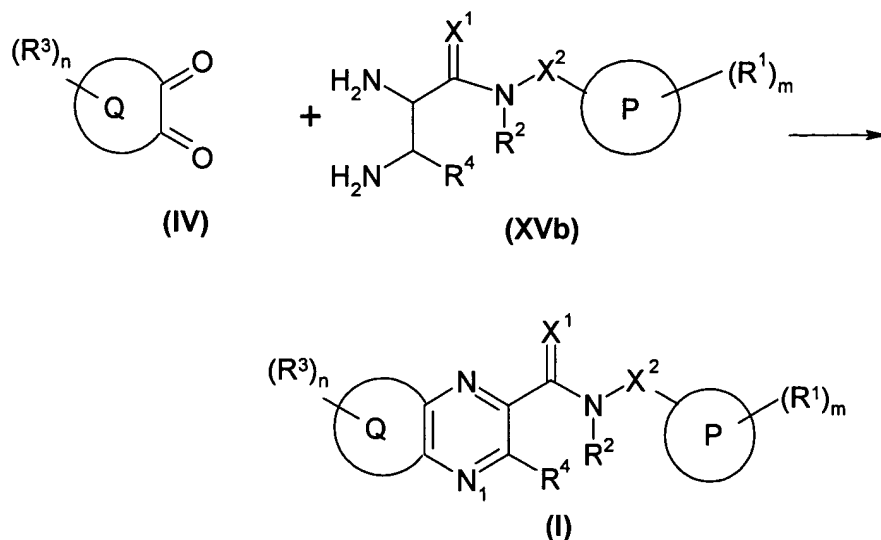
reacting a compound of formula VII, wherein R^y is H, with an activating agent followed by the treatment of the resulting acid halide, or otherwise to nucleophiles activated acid derivative, with an amine of formula XIV, to obtain the compound of formula I, alternatively,

B

reacting an amine of formula XIV with the compound of formula VII, wherein R^y is H, to obtain the compound of formula I, or

C

reacting a compound of formula VIa or the N_1 -oxide thereof, wherein R^x is C_{1-6} alkyl, with the appropriate amine such as the compound of formula XIV, to obtain the compound of formula I,
 or,

D

direct condensation of intermediates of formula IV and XVb, to obtain the compound of formula I.

26. (Withdrawn) Compounds

5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid methyl ester and
 5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid.

27. (Withdrawn) Compounds

3-methyl-5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid ethyl ester,
 3-methyl-5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid,
 2,3-diamino-N-(4-methyl-cyclohexyl)-propionamide,
 4-(tert-butyl-diphenyl-silanyloxy)-cyclohexane-1,2-dione,
 6,7-dimethyl-6,7-dihydro-5H-cyclopentapyrazine-2-carboxylic acid methyl ester,
 5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid methyl ester and
 5,6,7,8-tetrahydro-quinoxaline-2-carboxylic acid.

28. (Withdrawn) The compounds according to claims 26 and 27, for use as an intermediate in the preparation of the compound according to claim 1.

- 29. (New) The compound according to claim 3, wherein X^1 is oxygen.
- 30. (New) The compound according to claim 4, wherein X^1 is oxygen.
- 31. (New) The compound according to claim 3, wherein X^2 is a bond.
- 32. (New) The compound according to claim 4, wherein X^2 is a bond.
- 33. (New) The compound according to claim 5, wherein X^2 is a bond.
- 34. (New) The compound according to claim 3, wherein R^2 is hydrogen.
- 35. (New) The compound according to claim 4, wherein R^2 is hydrogen.
- 36. (New) The compound according to claim 5, wherein R^2 is hydrogen.
- 37. (New) The compound according to claim 6, wherein R^2 is hydrogen.
- 38. (New) The compound according to claim 3, wherein R^4 is hydrogen or methyl.
- 39. (New) The compound according to claim 4, wherein R^4 is hydrogen or methyl.
- 40. (New) The compound according to claim 5, wherein R^4 is hydrogen or methyl.
- 41. (New) The compound according to claim 6, wherein R^4 is hydrogen or methyl.
- 42. (New) The compound according to claim 7, wherein R^4 is hydrogen or methyl.

43. (New) The compound according to claim 3, wherein Q is a ring containing 5, 6 or 7 atoms independently selected from C, O and N, which may be saturated or partially unsaturated.

44. (New) The compound according to claim 4, wherein Q is a ring containing 5, 6 or 7 atoms independently selected from C, O and N, which may be saturated or partially unsaturated.

45. (New) The compound according to claim 5, wherein Q is a ring containing 5, 6 or 7 atoms independently selected from C, O and N, which may be saturated or partially unsaturated.

46. (New) The compound according to claim 6, wherein Q is a ring containing 5, 6 or 7 atoms independently selected from C, O and N, which may be saturated or partially unsaturated.

47. (New) The compound according to claim 7, wherein Q is a ring containing 5, 6 or 7 atoms independently selected from C, O and N, which may be saturated or partially unsaturated.

48. (New) The compound according to claim 8, wherein Q is a ring containing 5, 6 or 7 atoms independently selected from C, O and N, which may be saturated or partially unsaturated.

49. (New) The compound according to claim 3, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.

50. (New) The compound according to claim 4, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.

51. (New) The compound according to claim 5, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.

52. (New) The compound according to claim 6, wherein R³ is hydrogen, hydroxy, halogen, cyano, C₁₋₃alkyl or C₁₋₃alkoxyC₀₋₃alkyl.

53. (New) The compound according to claim 7, wherein R^3 is hydrogen, hydroxy, halogen, cyano, C_{1-3} alkyl or C_{1-3} alkoxy C_{0-3} alkyl.

54. (New) The compound according to claim 8, wherein R^3 is hydrogen, hydroxy, halogen, cyano, C_{1-3} alkyl or C_{1-3} alkoxy C_{0-3} alkyl.

55. (New) The compound according to claim 9, wherein R^3 is hydrogen, hydroxy, halogen, cyano, C_{1-3} alkyl or C_{1-3} alkoxy C_{0-3} alkyl.

56. (New) The compound according to claim 3 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

57. (New) The compound according to claim 4 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

58. (New) The compound according to claim 5 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

59. (New) The compound according to claim 6 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

60. (New) The compound according to claim 7 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

61. (New) The compound according to claim 8 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

62. (New) The compound according to claim 9 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.

63. (New) The compound according to claim 10 having a trans-relationship between R^1 and X^2 on ring P, wherein P is cyclohexane, and R^1 and X^2 are attached to P at positions 4 and 1, respectively.